# **Foreword**

#### How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff, it includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

An error is associated with each forecast, and this error decreases as the season progresses and more data becomes available. To express the range of error that can be expected, "most probable" forecasts are issued along with a range representing a "reasonable minimum" and a "reasonable maximum". Actual streamflow can be expected to fall within this range in eight out of ten years. Additionally two specific scenarios are provided based on the assumption that subsequent precipitation will be "wet", above average, or "dry", below average.

#### For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola Ave., Sulte 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Building A, 3rd floor, Denver, CO 80211
ldaho	3244 Elder Street, Room 124, Bolse, ID 83705
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	W. 920 Riverside, Room 360, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 "B" Street, Room 3124, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.

Water supply reports published by other agencies:

California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

# New Mexico Water Supply Outlook

# and

# Federal — State — Private Cooperative Snow Surveys

### Issued by

Wilson Scaling Chief Soil Conservation Service Washington, D.C.

# Released by

Ray T. Margo Jr. State Conservationist Soil Conservation Service Albuquerque, New Mexico

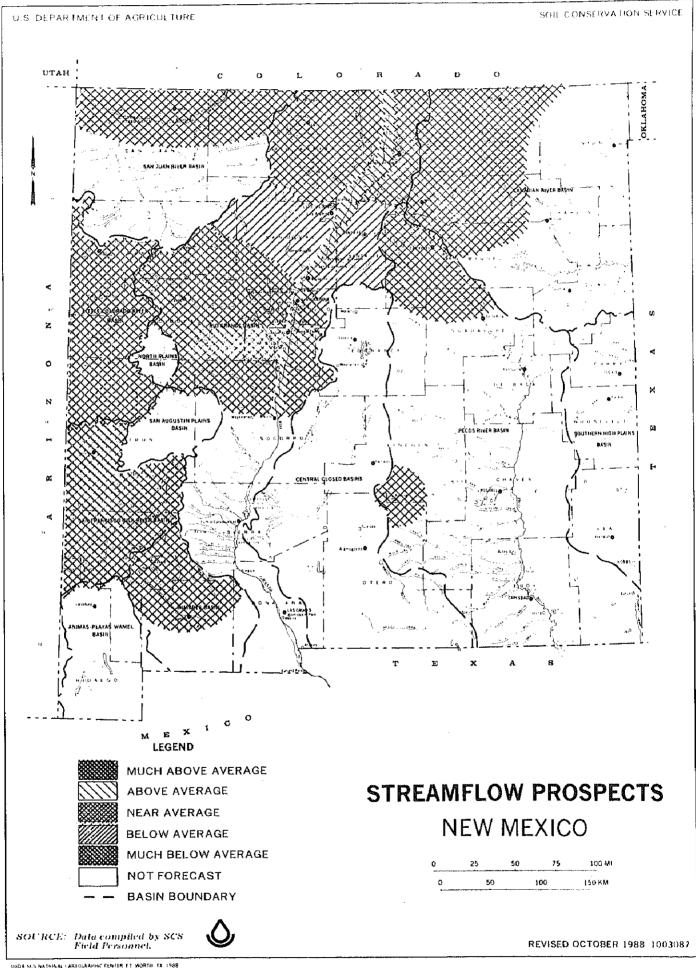
### Prepared by

J. Kenneth Martin Water Supply Specialist Soil Conservation Service 517 Gold Ave., SW, Rm. 3301 Albuquerque, New Mexico 87102

<sup>&</sup>quot;Programs and assistance of the United States Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin."

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#### GENERAL OUTLOOK

#### SUMMARY

THE WATER SUPPLY OUTLOOK FOR NORTHERN NEW MEXICO IS FOR NEAR AVERAGE ON MOST STREAMS. THE RIO GRANDE MAINSTEM IS EXPECTED TO BE ABOVE NORMAL. THE JEMEZ RIVER, SANTA CRUZ RIVER, AND THE SANTA FE RIVER ARE EXPECTED TO HAVE BELOW NORMAL VOLUMES FROM SNOWMELT. THE WEST-CENTRAL AND SOUTHWEST PORTIONS OF NEW MEXICO ARE IN THE MUCH BELOW AVERAGE RANGE. THE SNOWPACK HAS MELTED OUT EXCEPT FOR THE PEAKS ABOVE 10,500 FEET IN THE GILA WILDERNESS.

#### SNOWPACK

Snowpack conditions across the State declined rapidly during March. Below normal snowfall, above normal temperatures, and several days of strong winds contributed to the decline. The areas of the Sangre de Cristo Mountains that received heavy snows during early February currently have near normal snowpack. Snowpack conditions in all other areas have declined to the below average or much below average ranges. Meltout has occurred in the Zuni Mountains, the Mimbres River Basin, and below 10,500 feet in the San Francisco-Gila River Basin. Significant snowmelt has been observed four to six weeks earlier than normal this year in most areas.

#### PRECIPITATION

Precipitation in the mountains of New Mexico, for the month of March, ranged from 24 percent of average in the Little Colorado River Basin to 71 percent of average in the Mimbres River Basin. Mountain precipitation totals to date for the water year, October 1, 1988 to September 31, 1989, range from 103 percent of average in the Canadian River Basin to 58 percent of average in the Mimbres River Basin.

#### STREAMFLOW

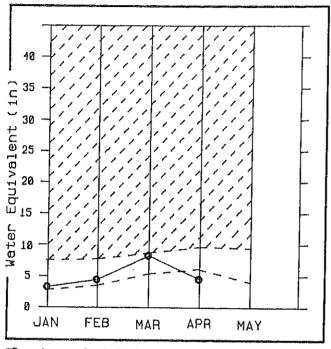
Streamflows observed by U.S. Geological Survey personnel for March indicate the flow for the Rio Grande below Taos Junction Bridge was 207 percent of median; the Pecos River near Pecos, NM, was 360 percent of median; and the Gila River near Gila, NM, was 89 percent of median. The observed streamflow information is based on provisional data and may be subject to change. Streamflow volume forecasts for New Mexico range from 125 percent of average during March-July on the Rio Grande at San Marcial to 3 percent of average in the Little Colorado Basin on both the Zuni River and the Rio Nutria.

#### RESERVOIRS

At the end of March, reservoir storage in the thirteen westwide reservoirs in New Mexico is reported to be 220 percent of average. Storage, by basins, ranges from 119 percent of average in the Pecos River Basin to 312 percent of average in the Rio Grande Basin.

# Canadian River Basin

# Mountain snowpack\* (inches)

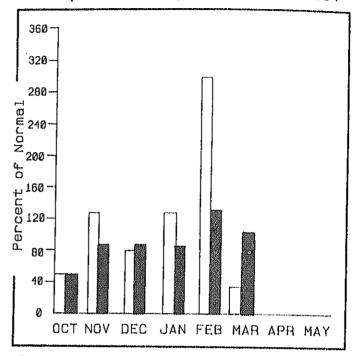


\*Based on selected stations

Maximum ファファ
Minimum マファフ

Current e----

# Preciptation% (percent of normal)



\*Based on selected stations

Monthly precipitation Year to data precipitation

# WATER SUPPLY OUTLOOK

Streamflow volume forecasts for the March-June runoff period decreased from the March forecasts. The snowpack decreased during March to 74 percent of average. Forecasts in the basin range from 112 percent of average on the Cimarron River below Eagle Nest Dam to 94 percent of average on the Mora River near Golondrinas.

#### CANADIAN RIVER BASIN

#### STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
VERMEJO RIVER nr Dawson	MAR-JUN	5.5	108	5.7	5.3	9.4	2.8	5.1
CIMARRON RIVER blw Eagle Nest Dam 2	MAR-JUN	11.0	112	12.4	9.6	14.5	7.5	9.8
CIMARRON RIVER or Cimarron 2	MAR-JUN	15.5	109	16.8	14.2	21	10.1	14.2
MORA RIVER nr Golondrinas	MAR-JUN	11.0	94	13.2	8.8	18.5	3.5	11.7
CANADIAN RIVER or Sanchez 2	MAR-JUN	54	100	60	46	85	23	54
RESERVOIR	STORAGE		(1000AF)	     	WATE	ERSHED SNOWP	ACK ANALYSI	\$
	USEABLE		ABLE STORAGE			NO	•	S YEAR AS % OF
RESERVOIR	CAPACITY:	THIS YEAR	LAST YEAR A'	/G. : WAT	WATERSHED		JRSES G'D LAS	T YR. AVERAGE
CONCHAS	330.0	268.0	289.5 13	7.2 CAN	ADIAN RIVER B	ASIN	6 184	74

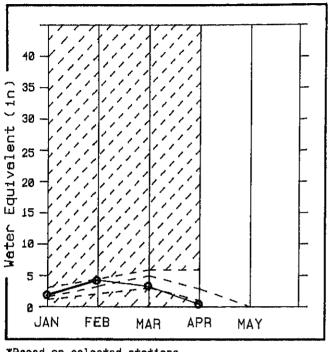
WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively. REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

<sup>(1) -</sup> REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

<sup>(2) -</sup> Corrected for upstream diversions or changes in reservoir storage.

# Little Colorado River Basin

### Mountain snowpack% (inches)



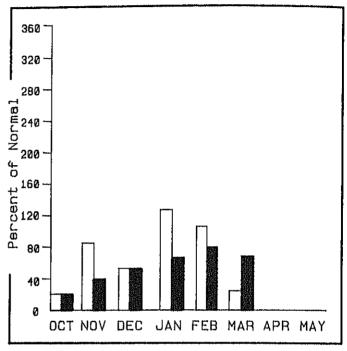
\*Based on selected stations

Max1mum DDDD

2222 Minimum

Average Current

### Preciptation% (percent of normal)



\*Based on selected stations

Monthly precipitation | Year to date precipitation

#### WATER SUPPLY OUTLOOK

Streamflow forecasts for the basin have dropped to 3 percent of average for the March-May period. The snowpack in the Zuni Mountains was depleted during March. Irrigation water supplies from snowmelt and current reservoir storage appear to be sufficient to meet the seasonal demands.

#### LITTLE COLORADO RIVER BASIN

STREAMFLOW FORECASTS

#### 25 YR. REAS. REAS. WET DRY MOST MOST MIN. AVG. SUBS. MAX. PROBABLE PROBABLE SUBS. (1000AF) (1000AF) (1000AF) (1000AF) (1000AF) (1000AF) (% AVG.) 0.0 3.1 0.9 2

3.2

0.0

	RESERVOIR STORAGE	(1000AF)	OMPACK AN	ALYSIS	
RESERVOIR	USEABLE : CAPACITY:	** USEABLE STORAGE ** THIS LAST YEAR YEAR AVG.	HATERSHED	NO. Courses Avg'd	THIS YEAR AS % OF LAST YR. AVERAGE
فنجن ودن فده جسم ميشنده بجنيف خدم جيزي			LITTLE COLORADO RIVER BAS	6	23 9

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively. REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

0.05

0.15

**FORECAST** 

PERIOD

APR-MAY

FORECAST POINT

ZUNI R aby Black Rock Res 2

RIO NUTRIA nr Ramah abv Upper Nutria APR-MAY

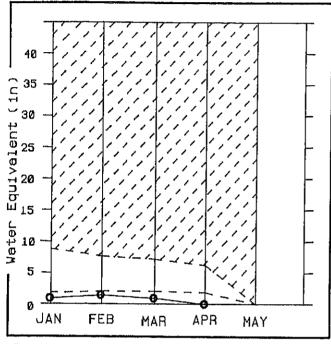
5.2

<sup>(1) -</sup> REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

<sup>(2) -</sup> Corrected for upstream diversions or changes in reservoir storage.

# Mimbres River Basin

### Mountain snowpack\* (inches)

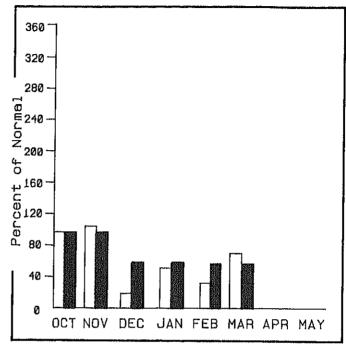


\*Based on selected stations

Maximum ことこ2 Minimum ファファ

Average \_\_\_\_\_

### Preciptation\* (percent of normal)



\*Based on selected stations

Monthly precipitation Year to date precipitation

#### WATER SUPPLY OUTLOOK

Streamflow volume forecast for the Mimbres River at Mimbres is for 14 percent of average during the April-May runoff period. The snowpack was depleted during early March producing very little runoff.

#### MIMBRES RIVER BASIN

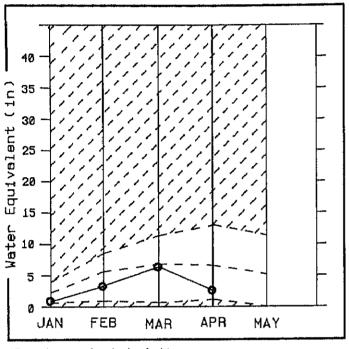
#### STREAMFLOW FORECASTS **FORECAST** MOST MOST WET DRY 25 YR. REAS. REAS. FORECAST POINT PROBABLE PROBABLE SUBS. SUBS. MAX. MIN. AVG. **PERIOD** (1000AF) (% AVG.) (1000AF) (1000AF) (1000AF) (1000AF) (1000AF) MBRES RIVER at Mimbres APR-MAY 0.3 14 2.3 0.1 2.1 RESERVOIR STORAGE (1000AF) MATERSHED SNOWPACK ANALYSIS USEABLE : \*\* USEABLE STORAGE \*\* MO. THIS YEAR AS % OF RESERVOIR CAPACITY: THIS LAST WATERSHED COURSES YEAR YEAR AVG. AVG'D LAST YR. AVERAGE MIMBRES RIVER BASIN 3 0 0

SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively. REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

 <sup>(1) -</sup> REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (2) - Corrected for upstream diversions or changes in reservoir storage.

# **Pecos River Basin**

### Mountain snowpack\* (inches)



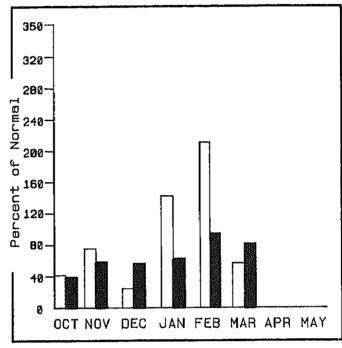
\*Based on selected stations

Maximum 22023

Minimum 5552

Average \_\_\_\_\_

### Preciptation% (percent of normal)



\*Based on selected stations

Monthly precipitation Year to date precipitation

### WATER SUPPLY OUTLOOK

Streamflow volume forecasts in the basin remain in the near normal range. The upper basin forecasts range from 90 percent of average on the Pecos River near Anton Chico to 93 percent of average on the Gallinas Creek near Montezuma. In the lower basin, the Rio Ruidoso near Hollywood is expected to have average volume flow.

#### PECOS RIVER BASIN

#### STREAMFLON FORECASTS

		•	2011 1 01,2	.01.010							
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	9	MET SUBS. OOAF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS MIN (1000/	۱.		25 YR. AVG. (1000AF)
							~~~				
GALLINAS CREEK nr Montezuma	MAR-JUL	7.0	93				19.0	2.	8		7.5
PECOS RIVER nr Pecos	MAR-JUL	45	82				75	15.	1		49
PECOS RIVER nr Anton Chico	MAR-JUL	46	90				77	14.	9		51
RIO RUIDOSO at Hollywood	MAR-JUN	6.5	105		7.1	5.9	10.3	2.	7		6.2
RESERV	OIR STORAGE	(	1000AF)	‡ ;		WATER	SHED SNOWPAG	X ANAL	YSIS		
RESERVOIR	USEABLE ;		BLE STORAG	E **	11475		NO.		THIS	YEAR	AS % OF
NEDENTUR	CAPACITY:	THIS YEAR	LAST YEAR	AVG.	WATE	KSHLD	Cour Avg '		LAST	YR.	AVERAGE
LAKE AVALON	6.0	0,9	2.7	1.9	PECOS	RIVER BASIN	6		70		39
LAKE MoMILLAN	34.0	010	28.5	20.7							
SANTA ROSA	447.0	86.5	112.0	91.1						*	
SUNNER	102.0	35,9	45,2	50.2							
					·				J.		

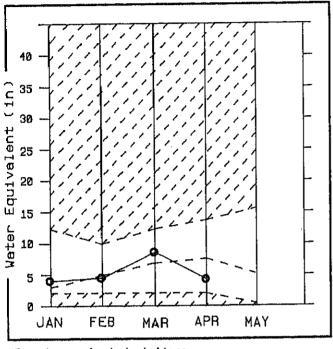
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(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

<sup>(2) -</sup> Corrected for upstream diversions or changes in reservoir storage.

# Rio Grande Basin

# Mountain snowpack\* (inches)



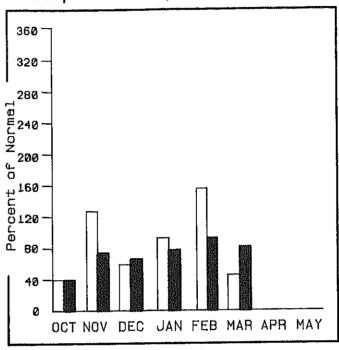
\*Based on selected stations

Max1mum

Minimum

Average \_\_\_\_\_\_ Current 6 0

## Preciptation\* (percent of normal)



\*Based on selected stations

Monthly precipitation | Year to date precipitation

#### WATER SUPPLY OUTLOOK

Streamflow volume forecasts for the Rio Grande Mainstem remain in the above average range. The Sangre de Cristo tributaries north of Taos and the Rio Chama are now in the near normal range. The tributaries in the southern Sangre de Cristo Mountains and the Jemez River are forecast to have below average volume flows.

#### STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	HET SUBS. (1000AF)	DRY SUÐS, (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AYG. (1000AF)
RIO GRANDE nr Del Norte 2	APR-SEP	580	114	590	575	725	435	510
CONEJOS RIVER blw Platoro Res 2	APR-SEP	70	106	73	67	87	54	66
CONEJOS RIVER nr Mogote 2	APR-SEP	215	105	225	205	280	150	204
COSTILLA CREEK nr Costilla 2	MAR-JUL	24	109	26	22	35	13.0	22
RED RIVER bl Fish Hatchery nr Questa	MAR-JUL	35	106	. 38	31	51	19.2	33
RIO HONDO near Valdez	MAR-JUL	18.0	110	21	15.1	28	8.1	16.3
RIO PUEBLO de TAOS or Teos	MAR-JUL	16.0	102	18.5	13.5	23	9.4	15.7
RIO PUEBLO de TAOS bl Los Cordovas	MAR-JUL	32	100	. 38	26	57	13.1	32
RIO CHAMA biw El Vado Dam 2	MAR-JUL	230	101	235	220	340	121	227
SANTA CRUZ RIVER at Cundiyo	MAR-JUC	13.0	83	14.6	11.4	22	4.0	15.6
RIO GRANDE at Otowi Bridge 2	MAR-JUL	790	118	805	785	1410	615	672
SANTA FE RIVER nr Santa Fe 2	MAR-JUL	2.8	70	3.0	2.6	4.8	0.8	4.0
JEMEZ RIVER nr Jemez	MAR-JUL	34	77	. 37	31	49	19.0	44
RIO GRANDE FLOODWAY at San Marcial 2	MAR-JUL	605	125	620	600	1120	440	485

	RESERVOIR STORAGE	(1000AF) :			HATERSHE	IALYSIS	
RESERYOIR	USEABLE ; CAPACITY; ;	** USE THIS YEAR	EABLE STOR/ LAST YEAR	AGE ++	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS X OF
ABIQUIU	554,5	186.8	183.8	30.3	RIO GRANDE BASIN	21	97 55
CABALLO	391.5	138.0	255.0	55.0			
COCHITI	502.3	52.0	123.3	40.1			
COSTILLA	16.0	4.0	6.1	5.5			
EL. VADO	186.3	170,0	119.0	54.3			
ELEPHANT BUTTE	2065.0	1958.0	2089.0	552.0			
HERON	400.0	366.0	385.0	185.6			

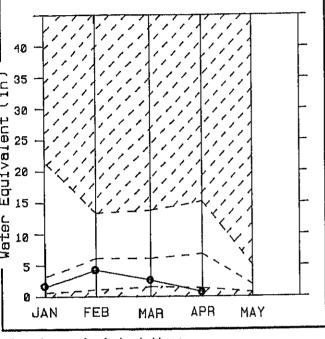
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<sup>(1) -</sup> REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

<sup>(2) -</sup> Corrected for upstream diversions or changes in reservoir storage.

# San Francisco-Gila River Basin

# **Mountain enowpack** (inches)

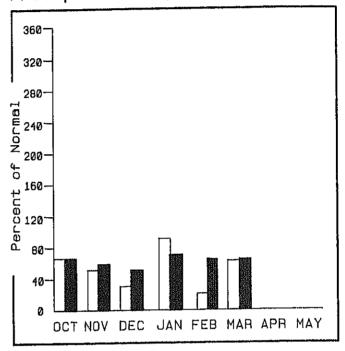


\*Based on selected stations

Maximum 7777

Average \_ \_ \_ \_ \_ •

# Preciptation% (percent of normal)



\*Based on selected stations

Monthly precipitation Year to date precipitation

#### WATER SUPPLY OUTLOOK

Snowpack meltout below 10,500 feet has occurred in the basin. Streamflow volume forecasts for the basin range from 17 percent of average on the Gila River near Virden to 31 percent of average on the San Francisco River at Glenwood. Irrigation water supplies from snowmelt do not appear to be sufficient to meet seasonal demands.

#### SAN FRANCISCO - GILA RIVER BASIN

#### STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)		ET BS. OAF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF	M]	N.		25 YR. AVG. (1000AF)
GILA RIVER at Gila	APR-MAY	6.5	26		7.5	5.5	28	2	2.5		25
GILA RIVER near Virden	APR-MAY	5.0	17	1	6.2	4.1	36	2	2.3		30
SAN FRANCISCO RIVER at Glenwood	APR-MAY	5.0	31	!	5.6	4.2	29	2	2.1		16.2
SAN FRANCISCO RIVER at Clifton	APR-MAY	10.0	30	1	1.6	8.7	53	4	.1		33
RESERVOI	R STORAGE		(1000AF)	     	<b>44</b> 4	WATE	rshed snow	PACK AN	LYSIS		
	USEABLE :	•	BLE STORAGE	++				). ).	THIS	YEAR	AS % OF
RESERVOIR	CAPACITY:		LAST YEAR /	VG.	MAIL	ERSHED	_	OURSES VG ' D	LAST	YR.	AVERAGE
			•		SAN	FRANCISCO - G	ILA RIVE	11	24		13

MET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

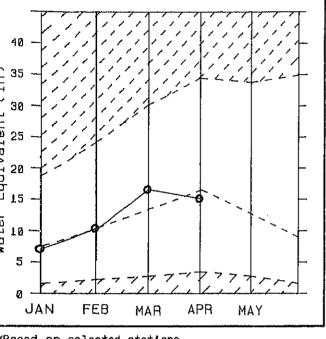
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

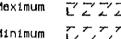
(2) - Corrected for upstream diversions or changes in reservoir storage.

# San Juan River Basin

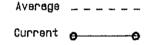
### **1ountain snowpack**※(inches)



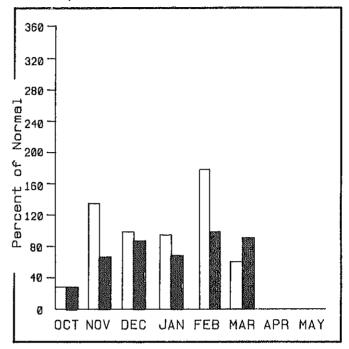








### Preciptation\* (percent of normal)



\*Based on selected stations

Monthly precipitation Year to date precipitation

#### WATER SUPPLY OUTLOOK

Streamflow volume forecasts for the basin are for near average flows. Forecasts range from 93 percent of average on the La Plata River at Hesperus to 98 percent of average on the Animas River at Durango.

#### SAN JUAN RIVER BASIN

#### STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)		MET SUBS. 000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS MIN (1000A			25 YR. AVG. 1000AF)
SAN JUAN RIVER or Archuleta 2	APR-JUL	715	94		800	630	965	50	Λ		764
ANIMAS RIVER at Durango	APR-SEP	475	98	• •	485	470	565	38			486
LA PLATA RIVER at Hesperus	APR-SEP	25	93	14 15 14	26	24	32	18.	0		27
	······································					. 20 de a 40 co 41 de 51 co 70 co 70 co 70					
RESERV	OIR STORAGE		(1000AF)	;		WATE	ERSHED SNOWPA	CK ANAL	YSIS		
DECEDIATE	USEABLE :		ABLE STORAG	E ++	LIATO	BOUCO.	NO.	rses	THIS Y	EAR /	AS X O
RESERVOIR	CAPACITY:	THIS YEAR	LAST YEAR	AVG.		RSHED	AVG		LAST Y	R.	AVERAGI
NAVAJO	1696.0	1210.0	1057.0	872.0 i	SAN	JUAN RIVER BA	ASIN 17		130		86

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively. REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
(2) - Corrected for upstream diversions or changes in reservoir storage.

# SNOW DATA MEASUREMENTS

APRIL 1989

	SNOW COURSE	ELEVATION			WATER CONTENT		
NEW	MEXICO						
	ALAMITOS BATEMAN SNOTEL BATEMAN BIG TESUQUE BITTER CREEK BOWL CANYON CHAMA DIVIDE CHAMITA SNOTEL CHAMITA CORDOVA ELK CABIN EMORY PASS #2 FRISCO DIVIDE SNOTEL FRISCO DIVIDE GALLEGOS PEAK HEMATITE PARK HIDDEN VALLEY	9800 9800 9800 10000 8800 8980 7750 8500 8500 10100 8250 7800 8000 9500 9500 9500 9500 9500 9500	3/30/89 3/30/89 3/29/89 3/29/89 4/01/89 3/31/89 3/31/89 3/30/89 4/01/89 4/01/89 3/27/89 3/27/89 3/31/89	24 0 0 2 0  12 2 0 0  0  24 13 0	7.5 .0 .0 1.8 .0 2.7 4.1 .5 .0 .0 .0 .0 .9.7 9.1 5.1	.5 13.5 9.8 4.3 .0 7.8 .0 12.6 7.9 .0 .2 7.5 5.5 2.0 5.5 15.9	13.0 5.6 4.5 10.5 2.5 8.7 9.0 11.8 2.9 1.8 13.0 12.2 4.4
	HOPEWELL LAKE HUMMINGBIRD LA CUEVA LOCKOUT MTN SNOTEL MCKNIGHT CABIN MOGOLLON NORTH COSTILLA SNTL NORTH COSTILLA OJO REDONDO PALO PANCHUELA SNOTEL PANCHUELA PAYROLE	8700 8150 9300 7000 10600 10600 8200 9300 8300 8300 10000	3/30/89 4/01/89 4/01/89 4/01/89 4/01/89 3/29/89 3/27/89 4/01/89 3/27/89 3/28/89	0  0  14 0 20  2	.0 .0 .0E 1.7 4.8 .0 7.5 3.0	11.0 5.2 .0 .0  1.6 2.0 .0 4.7 4.0 .7	7.2 .0 3.1 .1 3.6 6.5 3.6 7.9 5.6 2.9 9.0
	NORTH COSTILLA SNTL NORTH COSTILLA OJO REDONDO PALO PANCHUELA SNOTEL PANCHUELA PAYROLE POST OFFICE FLAT QUEMAZON SNOTEL QUEMAZON RED R PASS #2 SNOTEL RED RIVER PASS #2 REDSTONE TRAIL RICE PARK RIO EN MEDIO SAN ANTONIO SINK SANDOVAL SENORITA DIVIDE #1 SENORITA DIVIDE #1	9500 8780	3/30/89 3/30/89	0  24  16  0 19 22 7 4	2.0 1.5	4.0 3.1	5.9 8.2
;	SENORITA DVD #2 SNTL SENORITA DIVIDE #2 SIERRA BLANCA SIGNAL PEAK SNOTEL SILVER CREEK SNOTEL SILVER CREEK DIVIDE STATE LINE TAOS CANYON TAOS POWDERHORN TRES RITOS WESNER SPRINGS WHISKEY CREEK WHITEWATER	8600 10280 8360	4/01/89 3/30/89 3/28/89 4/01/89 4/01/89 4/01/89 3/27/89 3/30/89 3/30/89 3/30/89 4/01/89	1 21  0 7 65 2 29 11 27	1.4 .4 7.7 .0 .0E .0 2.7 25.8 1.1 9.6 4.7 9.5	6.5 2.8 10.1 .0 6.5  .0 1.9  .9 11.6 9.1 17.8	11.6 8.2 

# The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

New Mexico State Engineer

New Mexico Department of Game and Fish

Interstate Stream Commission

**Federal** 

U.S. Department of Agriculture Soil Conservation Service

Forest Service

U.S. Department of Commerce

NOAA, National Weather Service

U.S. Department of Interior
Bureau of Reclamation
Geological Survey
National Park Service
Bureau of Indian Affairs
U.S. Department of Defense

Army Corps of Engineers

Los Alamos National Laboratory

Local

Public Service Company of New Mexico

City of Las Vegas Village of Ruidoso

Zuni Tribe

Bluewater-Toltec Irrigation District

Costilla Land Company

Navajo Tribe

Ramah Valley Acequia

**Private** 

Moreno Ranch Vermejo Ranch

Other organizations and individuals furnish information for the snow survey reports.

Their cooperation is gratefully acknowledged.